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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,888	03/04/2002	David F. Bantz	YOR920010527US1	6489
29683	7590	12/19/2005	EXAMINER	
HARRINGTON & SMITH, LLP			NI, SUHAN	
4 RESEARCH DRIVE			ART UNIT	
SHELTON, CT 06484-6212			PAPER NUMBER	
			2646	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/090,888	<b>Applicant(s)</b> BANTZ ET AL.	
	<b>Examiner</b> Suhan Ni	<b>Art Unit</b> 2646	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 9/9/05.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 23-40 is/are pending in the application.
- 4a) Of the above claim(s) 38-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 23-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

1. The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group **Art Unit 2646**.

2. This communication is responsive to the provisional election made with traverse on 09/09/2005. Since the traversal remarks made in the election are persuasive and, therefore the restriction/election requirement mailed 08/09/2005 has been vacated. A new ground of rejection is set forth below in response to the amendment filed 10/12/2004 by the applicants.

3. Newly submitted claims 38-40 directed to an invention that is independent or distinct from the invention **originally claimed** for the following reasons: the limitation of “**the transmitter unit is adapted to automatically send the signal to the receiver without user activation**” is not originally presented in the claim(s).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 38-40 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

4. A complete reply to a future final office action must include cancellation of non-elected claims or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 and 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niederdrank (US 2004/0013280).

Regarding claim 1, Niederdrank discloses a system (Fig. 1) for adjusting audio output, comprising: a transmitter unit (3) adapted to be carried by a user, the transmitter unit comprising a memory (22) and a signal transmitter (23); and an entertainment sound generating system (1-2) comprising a sound generator (10) adapted to output sound signals based upon input data, a signal receiver (16), means (11) for altering the sound signals from the sound generator based upon a signal transmitted by the signal transmitter to the receiver, and at least one acoustic transducer (13) coupled to the altering means as claimed.

But Niederdrank does not clearly teach that the sound generator is adapted to output entertainment sound signals based upon input entertainment data and a player adapted to play the entertainment data as claimed.

Since Niederdrank does disclose a hearing device having at least one hearing aid, and for a hearing aid user to listen to entertainment sound generated by a player, such as a TV set, a CD player, or MP3 player is very well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide a suitable player, such as a CD player to the user of the hearing aid, in order to provide desirable entertainment, such as music, to the hearing aid user.

Regarding claims 2, 5, 30 and 32, Niederdrank does not clearly teach that the memory comprises the hearing information regarding a user's auditory characteristics as claimed. Since

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providing a customized hearing aid system by desirably loading user's information into the system is very well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to desirably load, such as AM, FM modulation, suitable information of the user to the hearing system, in order to provide a customized hearing aid system for specific hearing aid user.

Regarding claims 3 and 30, Niederdrank does not clearly teach that the transmitter unit further comprises a battery connected to the signal transmitter as claimed. Since providing a suitable power source for a transmitter unit is very well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide a suitable power source, such as a battery for the transmitter unit of the hearing system, in order to power up the transmitter unit for effectively transmitting data or signals.

Regarding claims 4 and 31, Niederdrank does not clearly teach that the memory is a nonvolatile memory as claimed. Since providing a non-volatile memory for a transmitter unit of the hearing aid system is very well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide a suitable memory device, such as a non-volatile memory for the transmitter unit of the hearing system, in order to efficiently and effectively manufacture the hearing aid system.

Regarding claims 6 and 33, Niederdrank further discloses the system for adjusting audio output, wherein the transmitter unit is adapted (23) for reprogramming of the memory.

Regarding claim 7, Niederdrank further discloses the system for adjusting audio output, wherein the altering means comprises a processor (11) connected to the signal receiver (16) and the sound generator (10).

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Regarding claims 8-13 and 34-37, Niederdrank further discloses the system for adjusting audio output, wherein the altering means comprises an electrical sound signal modifier (11 and 17) connected to an output of the sound generator and controlled by the processor (14-15). But Niederdrank does not clearly teach a multi-frequency-channel processing as claimed. Since providing a filterbank for a multi-frequency-channel processing for a hearing aid system is very well known in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide suitable mean, such as a filterbank and processing software for the hearing aid system, in order to provide a hearing system having effective and efficient multi-frequency-channel processing feature.

Regarding claim 14, Niederdrank further disclose the system for adjusting audio output, wherein the at least one acoustic transducer comprises speakers (13 of 1-2).

Regarding method claims 23-29, they are similar to claims 1-14 and 30-37 except for being couched in method terminology; such methods would be inherent when the structure is shown in the cited.

### ***Response to Amendment***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any response to this final action should be mailed to:

**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

or faxed to:

**(703) 308-9051**, (for formal communications; please mark "EXPEDITED PROCEDURE"), or

**(703) 305-9508**, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is **(571)-272-7505**, and the number for fax machine is **(571)-273-7505**. The examiner can normally be reached on Monday through Thursday from 10:00 am to 8:00 pm. If it is necessary, the examiner's supervisor, **Sinh N. Tran**, can be reached at **(571)-272-7564**.

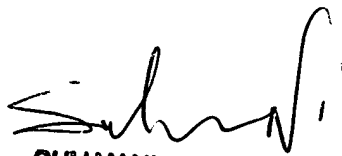
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

December 10, 2005

  
**SUHAN N.**  
**PRIMARY EXAMINER**